Expeditionary Warfare Conference
23 October, 2003

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PEO Littoral and Mine Warfare

- **PEO Littoral and Mine Warfare**
  - **update**
- **Mine Warfare**
  - **Dedicated Mine Warfare**
  - **Organic Mine Warfare**
- **Unmanned Systems to LCS Mission Modu**
  - **Littoral ASW**
  - **Mine Warfare**
  - **ASuW**

PEO Littoral and Mine Warfare

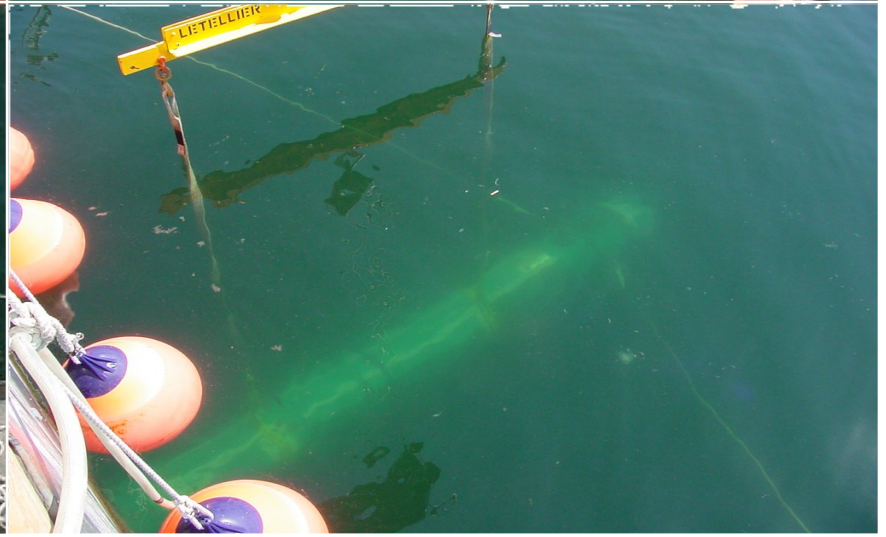
Acquiring Material Solutions for Assured Access

- ***PMS 181 Maritime Surveillance Sy***
- ***PMS 183 Advanced Deployable Sys***
- ***PMS 210 Air Mine Warfare***
- ***PMS 403 Unmanned Underwater V***
- ***PMS 420 Mission Modules***
- ***PMS 490 Surface Mine Warfare***
- ***PMS EOD Diver and EOD Systems***
- ***PMS NSW Naval Special Warfare***

PEO Littoral and Mine Warfare

- ***Maintaining <u>Dedicated MIW</u>***
  - **AN-AQS 24 delivered to Fleet (first EOID)**
  - **MK 105 upgrade delivery completed**
  - **First tactical UUVs provided in wartime (REMUS/SCULP**
  - **ICWS installed on HSVX-2 (testbed for JUSC2)**
  - **EMNS on M-Class ships (expendable UUV neutralizer)**
  - **AMNS on H-53 (RDC)**
- ***<u>Staying the Course</u> for FY 05 IOC Organic***

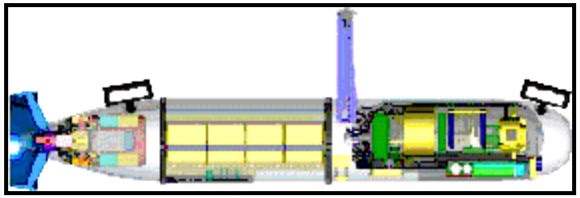
LMRS In-Water Testing at Fox Island



The EOD Expeditionary "Toolbag"

Tactical Integration of Small UUVs with Diver & MMS Forces

EOD & VSW DIVER TOOLS



MCM MARINE MAMMAL SYSTEMS

AN/WLD-1(V)1
Remote Minehunting System (RMS)

Remote Minehunting Vehicle
EDM #1 Completed Fabrication
15 Jul 03

DDG91 Alpha Trials
Launch & Recovery Subsystem of
Remote Minehunting Vehicle Mock-up

ALMDS Flight testing on SH-60F in Panama

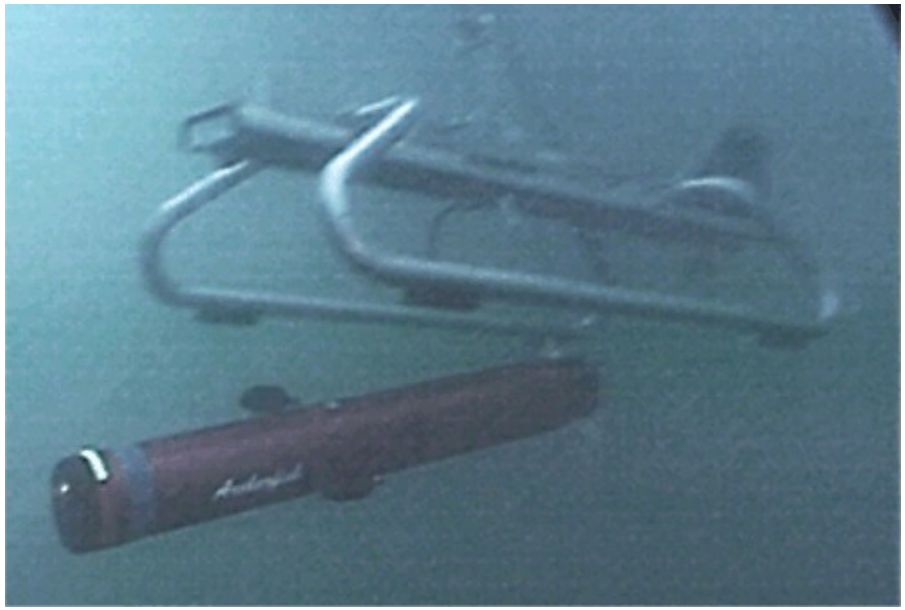
AN/AQS-20A In-Water testing at Panama C

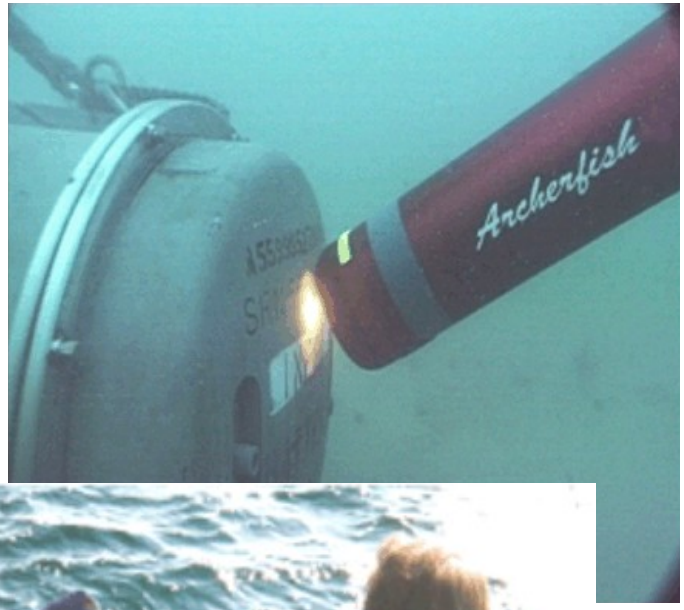
Shipboard Contractor Testing (CT) successfully Completed on 11 October 2003

MH-53E CT starting on 16 October

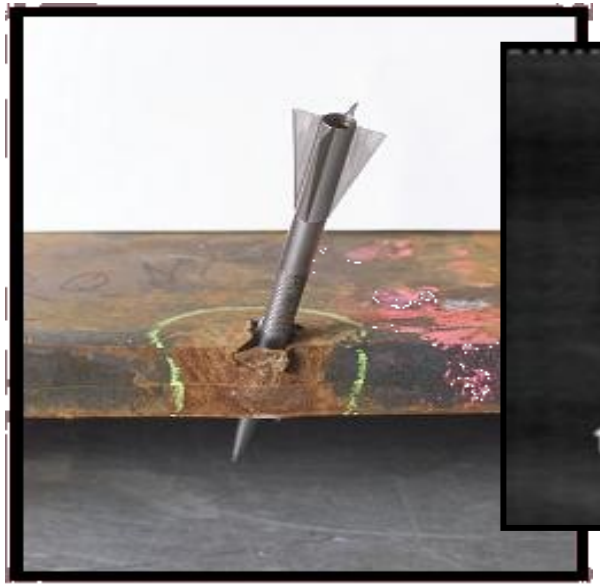
20 flights are planned before Christmas

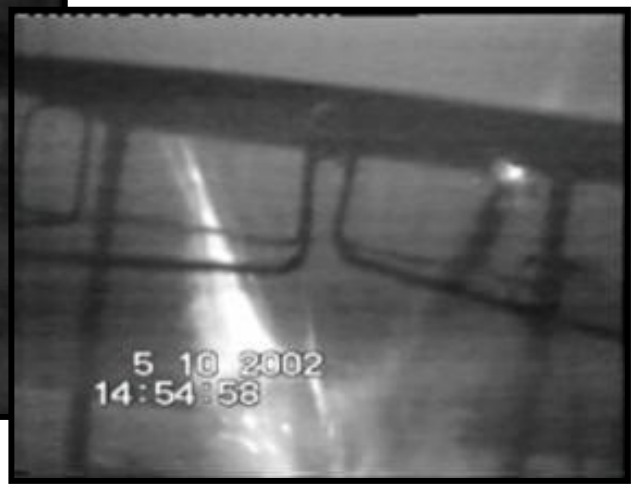
AMNS In-Water testing in GOMEX

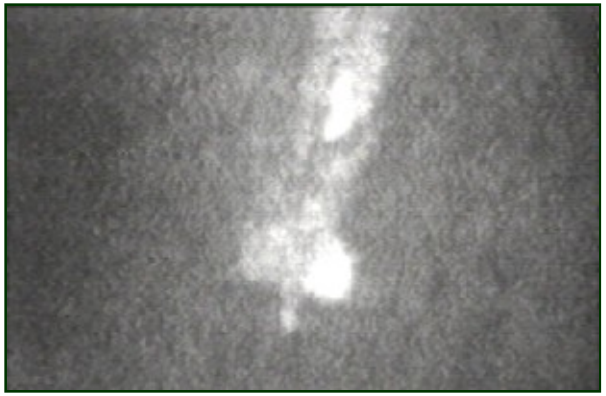




Ramics/MK-44 in Water Testing







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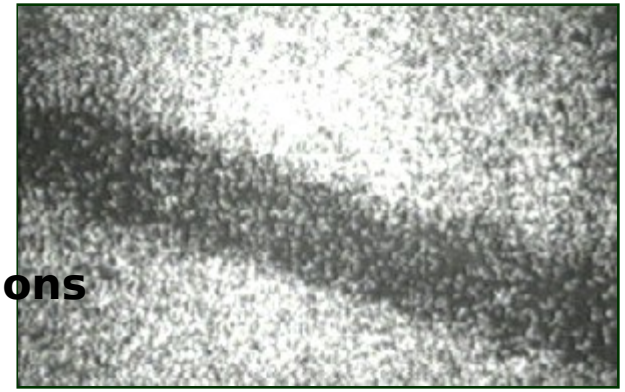
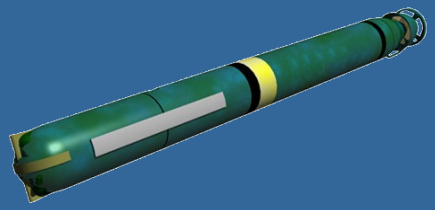
Sea Sniper Applications



APPLICATION

Applying the Modularity Concept (Mission Module)



MISSION RECONFIGURABLE

ISR, DETECT/ENGAG… …MMS RELAY, ASW, MIW, AS… …EARCH & SURVEY

- CBR DETECTOR
- SYNTHETIC APERTURE SONAR
- ENVIRONMENTAL DATA SENSO
- BOTTOM MAPPING & IMAGING

- EO SENSOR
- NEUTRALIZER WEAPON
- WMD SENSOR
- MINE SWEEPING

- MAGNETIC SENSOR
- COMMS PKG/RELAY
- EO SENSOR
- NEUTRALIZER WEAPON
- WMD SENSOR

Unmanned Systems Deploying Smaller UUV & USV Systems

FUTURE

Acquisition/Life Cycle Implications

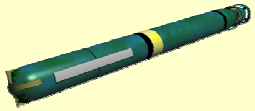
Lifetime

20+ yrs

Manned Platforms

5-10 yrs

Unmanned Systems



1-3 yrs

Modular & Scaleable Payloads

● Receivers ■ Sources ◆ Modems ▲ Batteries Weapons

Expendable

Micro Vehicles ? ? ? ? Micro Sensors

PEO Littoral and Mine Warfare

- **PEO Littoral and Mine Warfare**
  - Organized to focus on Assured Access
- **Mine Warfare**
  - N75 vision
- **Unmanned Systems to LCS Mission Modu**
  - Common Vehicle Loads for ship
  - Multiple payloads